

## ATTACHMENT "B"

### **Addenda (Significant Revision) to Operating Permit No. 36183** **as modified by Minor Permit Revision 40012**

#### **for** **Snowflake White Mountain Power, LLC**

Conditions II.B.1.c i and d of Attachment "B" of Operating Permit No.36183 have been revised to read as follows:

## **II. FACILITY WIDE REQUIREMENTS**

### **B. Operational Limitations and Standards**

#### **1. Fuel Limitations**

**c.**

- i. The Permittee shall limit the maximum heat input to 1,033,000 MMBtu (High Heating Value dry basis), based on wood fiber firing, for any consecutive twelve (12) month period.

[A.A.C.R18-2, 306.01 and 331.A.3.a]

[Material permit conditions are identified by underlines and italics]

#### **d. Supplemental Fuel**

- i. The Permittee shall burn only pipeline quality natural gas as a supplemental fuel. The supplemental fuel may be used for startup or to keep the appropriate temperature of the fluidized bed.

[A.A.C. R18-2-306.A.2]

- ii. The Permittee shall not cause, allow, or permit the use of natural gas such that the natural gas usage exceeds a 10 percent annual capacity factor.

[A.A.C. R18-2-306.01 and 331.A.3.a]

[Material permit conditions are identified by underlines and italics]

- iii. The Permittee shall not cause, allow, or permit the use of natural gas such that the natural gas usage exceeds 30 percent of the heat input on a 30-day rolling average of steam generating unit operating days from the combustion of all fuels.

[A.A.C. R18-2-306.01 and 331.A.3.a]

[Material permit conditions are identified by underlines and italics]

Conditions II.C.3 of Attachment "B" of Operating Permit No. 36183 is hereby revised:

### **C. Recordkeeping and Reporting Requirements**

3. The Permittee shall calculate and record a daily MMBtu throughput based on the amount of wood fiber, wood waste, and natural gas combusted in the boiler and the most recent BTU values determined by Condition II.D and the lower heating value of the natural gas.

Condition II.C.12 of Attachment "B" of Operating Permit No. 36183 is hereby revised:

**C. Recordkeeping and Reporting Requirements**

12. The annual capacity factor for natural gas is determined by dividing the actual heat input to the boiler during the calendar year from the combustion of natural gas, by the potential heat input to the boiler if the boiler had been operated for 8,760 hours at the maximum design heat input capacity. [40 CFR 60.43b(e)]

Condition II.C.13 of Attachment "B" of Operating Permit No. 36183 is hereby added:

13. The Permittee may submit electronic semi-annual reports for SO<sub>2</sub>, NO<sub>x</sub>, or opacity in lieu of submitting the written reports. The format of each semi-annual electronic report shall be coordinated with the Director. The electronic report(s) shall be submitted no later than 30 days after the semi annual calendar and shall be accompanied by a certification statement from the Permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with the Director to obtain an agreement to submit reports in this alternative format. [40 CFR 60.49b(v)]

Condition II.C.14 of Attachment "B" of Operating Permit No. 36183 is hereby added:

14. The Permittee shall calculate and record each day a 30-day rolling average of steam generating unit operating days of natural gas heat input as a percentage of the combustion of all fuels to demonstrate compliance with Condition II.B.1.d.iii. [A.A.C. R18-2-306.A.3.c]

Condition II.D of Attachment "B" of Operating Permit No. 36183 is hereby revised:

**D. Recordkeeping and Reporting Requirements**

The Permittee shall conduct semi-annual performance tests on the wood waste and wood fiber to determine their heating values. The heating values shall be determined using ASTM E870-82 and E711-87 or equivalent.

Condition III.B.3.b ii of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

**III. BOILER REQUIREMENTS**

**B. Particulate Matter and Opacity**

**3. Monitoring, Recordkeeping, and Reporting Requirements**

b.

- ii. The span value of the COMS shall be between 60 and 80 percent. The COMS shall calibrate daily at zero and at a range between 30 to 40 percent. The COMS shall meet the data quality

Conditions III.B.4.c and d of Attachment "B" of Operating Permit No.36183 have been revised to read as follows:

### III. BOILER REQUIREMENTS

#### 4. Performance Testing Requirements

- c. All performance testing for particulate matter shall be conducted in accordance with either EPA Reference Method 5 or 201A, and EPA Reference Method 202, or equivalent as approved by the Director.
- d. Within 90 days after startup the Permittee shall establish the indicator ranges to be used in Condition III.B.3.d.iv. The ranges shall be established by recording the pressure drop across each module and across the entire fabric filter, and recording the opacity. The ranges shall be submitted to the Director and Administrator for approval. Updated indicator ranges may be submitted to the Director and Administrator for approval based on annual performance testing or increased operating data.

Condition III.C of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

### III. BOILER REQUIREMENTS

#### C. Nitrogen Oxide (NO<sub>x</sub>)

1. Emission Limitation/Standard [A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]  
[Material Permit Conditions are indicated with underline and italics]

*The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, including emissions generated during start-ups and shutdowns, NO<sub>x</sub> emissions in excess of 240 tons per year on a 365 day rolling total.*

2. Air Pollution Control [A.A.C. R18-2-306.A.2, -306.01.A, and -331.A.3.d and e]  
[Material Permit Conditions are indicated with underline and italics]

*The Permittee shall install, maintain, and operate a selective non-catalytic reduction system in a manner consistent with good air pollution control practice to control nitrogen oxide emissions from the boiler exhaust.*

3. Monitoring, Recordkeeping, and Reporting Requirements

- a. *The Permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS), and record the output of the system in ppmv and pounds per hour, for measuring emissions of nitrogen oxides from the boiler stack.*

[A.A.C. R18-2-306.01 and -331.A.3.c]

[Material permit condition is underlined and italicized]

b. Continuous Monitoring Systems Requirements

[A.A.C.R18-2-306.01, A.A.C.R18-2-306.A.3.c and A.A.C.R18-2-312.H.3]

- i. The Permittee shall follow the monitoring procedures and performance specifications of 40 CFR Part 60, Appendix B and Appendix F.
- ii. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CEMS. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during the reporting period.
- iii. The CEMS shall be designed so that one cycle of operation is complete for each successive 15-minute period.
- iv. All data gaps shall be filled with the average hourly NO<sub>x</sub> concentration and volume recorded by the CEMs for the hour immediately before and the hour immediately after the missing data period.
- v. The NO<sub>x</sub> analyzer range shall be 0 to 100 ppm. The NO<sub>x</sub> analyzer shall meet the data quality assurance criteria of 40 CFR Part 60, Appendix B, Performance Specification 2 and Appendix F.

- c. The Permittee shall maintain a 365-day rolling total of NO<sub>x</sub> emissions from the boiler to demonstrate compliance with emission limitation set in Condition III.C.1 of this Attachment. [A.A.C.R18-2-306.01.A]

- d. The Permittee shall submit a semi-annual report along with the semi-annual compliance certification to include the following information:

- i. Rolling total of NO<sub>x</sub> emissions on a 365 day basis in that reporting period; and
- ii. A monitoring systems performance report or a summary report form to include:

- (a) All the continuous monitoring system downtime in the corresponding reporting period due to:

- (1) Monitor equipment malfunction;
- (2) Non-Monitor equipment malfunction;
- (3) Quality assurance calibration;

- (4) Other known factors;
- (5) Unknown causes;
- (6) Total CEMS downtime;
- (7)  $(\text{Total CEMS downtime}) * 100 / (\text{Total source operating time})$

- (b) Exceedances are defined as any emissions in excess of the limits set in Condition III.C.1 of this Attachment. The Permittee shall follow the procedures in Section XII of Attachment "A" in reporting all exceedances.

[A.A.C.R18-2-306.A.5]

#### 4. Performance Testing Requirement

[A.A.C. R18-2-312]

- a. Within 180 days after startup, and annually thereafter, the Permittee shall conduct performance tests (as part of the RATA for the CEMS) for nitrogen oxide emissions from the boiler stack.
- b. Subsequent performance tests for nitrogen oxide emissions being emitted from the boiler stack shall be conducted as required by the Director.
- c. All performance testing for nitrogen oxide shall be conducted in accordance with EPA Reference Method 20 or equivalent as approved by the Director.

Conditions III.D.2.b.ii and v of Attachment "B" of Operating Permit No.36183 have been revised to read as follows:

### III. BOILER REQUIREMENTS

#### D. Carbon Monoxide (CO)

##### 2. Monitoring, Recordkeeping, and Reporting Requirements

##### b. Continuous Monitoring Systems Requirements

[A.A.C.R18-2-306.01, A.A.C.R18-2-306.A.3.c and A.A.C.R18-2-312.H.3]

- ii. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CEMS. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during reporting period.
- v. The CO analyzer shall be a dual range analyzer; 0 to 200 ppm low range and 0 to 1000 ppm high range. The CO analyzer shall meet the data quality assurance criteria of 40 CFR Part 60, Appendix B, Performance Specification 4 and Appendix F.

Condition III.D.2.d of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

### III. BOILER REQUIREMENTS

**D. Carbon Monoxide (CO)**

**2. Monitoring, Recordkeeping, and Reporting Requirements**

d. The Permittee shall submit a semi-annual report based on the same reporting period as compliance certification to include the following information:

i. Rolling total of CO emissions on a 365 day basis in that reporting period; and

ii. A monitoring systems performance report or a summary report form to include:

(a) All the continuous monitoring system downtime in the corresponding reporting period due to:

- (1) Monitor equipment malfunction;
- (2) Non-Monitor equipment malfunction;
- (3) Quality assurance calibration;
- (4) Other known factors;
- (5) Unknown causes;
- (6) Total CEMS downtime;
- (7)  $(\text{Total CEMS downtime}) * 100 / (\text{Total source operating time})$

(b) Exceedances are defined as any emissions in excess of the limits set in Condition III.D.1 of this Attachment. The Permittee shall follow the procedures in Section XII of Attachment "A" in reporting all exceedances.  
[A.A.C.R18-2306.A.5]

Condition III.D.3.c of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

**III. BOILER REQUIREMENTS**

**D. Carbon Monoxide (CO)**

**3. Performance Testing Requirement**

c. All performance testing for CO shall be conducted in accordance with EPA Reference Method 10 or equivalent as approved by the Director.

Conditions III.E 2 b ii, v and d of Attachment "B" of Operating Permit No.36183 have been revised to read as follows:

**III. BOILER REQUIREMENTS**

**E. Sulfur Dioxide (SO<sub>2</sub>)**

2. Monitoring, Recordkeeping, and Reporting Requirements

b. Continuous Monitoring Systems Requirements

[A.A.C. R18-2-306.01, -306.A 3.c and -312.1.3]

- ii. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CEMS. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during the semi-annual reporting period.
- v. The SO<sub>2</sub> analyzer span range shall be 0 to 50 ppm. The SO<sub>2</sub> analyzer shall meet the data quality assurance criteria of 40 CFR Part 60, Appendix B, Performance Specification 2 and Appendix F.
- d. The Permittee shall submit a semi-annual report based on the same semi-annual reporting period as the compliance certification to include the following information:
  - i. Rolling total of SO<sub>x</sub> emissions on a 365 day basis in that reporting period; and
  - ii. A monitoring systems performance report or a summary report form to include:
    - (a) All the continuous monitoring system downtime in the corresponding reporting period due to:
      - (1) Monitor equipment malfunction;
      - (2) Non-Monitor equipment malfunction;
      - (3) Quality assurance calibration;
      - (4) Other known factors;
      - (5) Unknown causes;
      - (6) Total CEMS downtime;
      - (7) (Total CEMS downtime) \* 100 / (Total source operating time)
    - (b) Exceedances are defined as any emissions in excess of the limits set in Condition III.E.1 of this Attachment. The Permittee shall follow the procedures in Section XII of Attachment "A" in reporting all exceedances.

[A.A.C.R18-2-306.A.5]

Condition III.E 3 c of Attachment "B" of Operating Permit No. 36183 has been revised to read as follows:

**III. BOILER REQUIREMENTS**

**E. Sulfur Dioxide (SO<sub>2</sub>)**

3. Performance Testing Requirement

- c. All performance testing for SO<sub>2</sub> shall be conducted in accordance with EPA Reference Method 6 or equivalent as approved by the Director.

Condition III.F 2 c of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

**III. BOILER REQUIREMENTS**

**F. Volatile Organic Compounds (VOC)**

2. Performance Testing Requirement

[A.A.C. R18-2-312]

- c. All performance testing for VOC shall be conducted in accordance with either EPA Reference Method 25 or 25A, whichever is appropriate. Alternative test methods may be used with approval of the Director.

Conditions III.G 1 a and b of Attachment "B" of Operating Permit No.36183 have been revised to read as follows:

**III. BOILER REQUIREMENTS**

**G. Hazardous Air Pollutants**

1. Emission Limitations/Standards

- a. The Permittee shall not cause to be discharged into the atmosphere from the boiler stack Including emissions generated during start-ups and shutdowns, total hazardous air pollutant emissions in excess of 0.0151 lbs/MMBtu on a three hour average.

[A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]

[Material Permit Conditions are indicated with underline and italics]

- b. The Permittee shall not cause to be discharged into the atmosphere from the boiler stack including emissions generated during start-ups and shutdowns, emissions of any single hazardous air pollutant in excess of 0.00606 lbs/MMBtu on a three hour average.

[A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]

[Material Permit Conditions are indicated with underline and italics]

Conditions III.G.1.c and d are removed.

Condition III.G.2.b is removed

Condition III.G 3 a of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

**III. BOILER REQUIREMENTS**

**G. Hazardous Air Pollutants**

3. Performance Testing Requirement

[A.A.C. R18-2-312]



- a. All performance testing for HAP(s) shall be conducted in accordance with either EPA Reference Methods used in Conditions III.G.3.a.i through G.3.a.iii. Alternative test methods may be used with approval of the Director.

Conditions III.H A 3, 6, and 7 a of Attachment "B" of Operating Permit No.36183 have been revised to read as follows:

### **III. BOILER REQUIREMENTS**

#### **H. Oxygen**

##### **A. Monitoring, Recordkeeping, and Reporting Requirements**

3. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CMS. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during the semi annual reporting period.
6. The O<sub>2</sub> analyzer span range shall be 0 to 25 percent. The O<sub>2</sub> analyzer shall meet the data quality assurance criteria of 40 CFR Part 60, Appendix B, Performance Specification 3 and Appendix F.
7. The Permittee shall submit a semi-annual report based on the same reporting period as compliance certification to include the following information:

Condition IV A 2 of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

### **IV. COOLING TOWER REQUIREMENTS Particulate Matter and Opacity**

#### **A. Emission Limitations/Standards**

##### **2. Opacity**

- a. The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any cooling tower stack, opacity which exceeds 20% as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B.33]

Condition VIII A. 1. b of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

### **VIII. OTHER PERIODIC ACTIVITY REQUIREMENTS**

#### **A. Abrasive Blasting**

##### **Particulate Matter and Opacity**

1. Emission Limitations/Standards

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations to exceed 20% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B.3]

Condition VIII B.1. a of Attachment "B" of Operating Permit No.36183 has been revised to read as follows:

## **VIII. OTHER PERIODIC ACTIVITY REQUIREMENTS**

### **B. Use of Paints**

1. Volatile Organic Compounds

a. Emission Limitations/Standards

While performing spray-painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C. R18-2-727.A]

- (2) The Permittee or their designated contractor shall not either:

- (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
- (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C. R1 8-2-727.B]

- (3) For the purposes of Condition VIII.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions VIII.B.1.a(3)(a) through VIII.B.1.a(3)(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

- (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
- (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C. R1 8-2-727.C ]

- (4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions VIII.B.1.a(3)(a) through VIII.B.1.a(3)(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[AAC. R18-2-727.D].

b. Monitoring and Recordkeeping Requirements

- (1) Each time a spray painting project is conducted, the Permittee shall log in ink, or in an electronic format, a record of the following:

- (a) The date the project was conducted;
- (b) The duration of the project;
- (c) Type of control measures employed;
- (d) Material Safety Data Sheets for all paints and solvents used in the project; and
- (e) The amount of paint consumed during the project.

- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition VIII.B.1.b(1) above.

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

[A.A.C. R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-727.

2. Opacity

a. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations to exceed 20% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B.3]

b. Permit Shield

[A.A.C R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-702.B.2 and A.A.C. R18-2-702.B.3.